

RECOGNITION OF *LITORIA EUCNEMIS* (LÖNNBERG) IN AUSTRALIA. *Memoirs of the Queensland Museum* 34(1): 94. 1993:- In 1979, in the McIlwraith Ra., Cape York Peninsula (CYP), one of us (KMCD) recorded the call of a frog in the *Litoria eucnemis* species-group (Tyler & Watson, 1985). The call, a series of short growls, has been confirmed recently (September, 1993, KMCD). It clarifies nomenclature of Australian taxa in the *L. eucnemis* group.

Species of this group occur in New Guinea as well as Australia and three names have been proposed for them — *Hyla eucnemis* Lönnberg, 1900 (described from Sattelberg, Huon Peninsula, PNG); *H. genimaculata* Horst, 1883 ('Gebeh' Is, west of Waigeo Is., West Irian); and *H. serrata* Andersson, 1916 (Malanda, Atherton and Carrington, NEQ).

Australian 'eucnemis' occur in three discrete populations: southern (Paluma-Big Tableland, 19°01'S 146°12'E-15°42' 145°16', NEQ); middle (McIlwraith Ra.-Iron Ra., 13°50'S 143°17'E-12°46' 143°16', CYP); and northern (Wenlock R.-Ducie R., 12°16'S 141°59'E-12°07' 142°21', CYP). These populations have always been treated as a single taxon, but the names *Litoria serrata*, *L. genimaculata* and *L. eucnemis* have variously been applied (e.g. Ingram & Covacevich, 1981; Cogger et al, 1983; Tyler & Watson, 1985).

There are, however, at least two taxa in Australia with distinctly different mating calls. Males of the southern population produce a series of soft 'ticks' (SJR, KMCD, GJI, pers. obs.; Fig. 1). Those of the middle population have a series of short growls (Tyler & Watson, 1985). Calls of the northern population have not been recorded.

In New Guinea there are also two taxa with distinct calls: one resembling a short, repeated 'growl' (described as 'waa waa' by Menzies (1976) and as 'groups of low, soft chuckling notes' followed by a 'series with several louder, shorter, pulsed calls' by Zweifel (1980)); the other a series of soft 'ticks'. Both authors also concluded there were two morphologically similar species distinguished primarily by mating call structure, and by slight differences in degree of finger webbing and size. They assigned the name

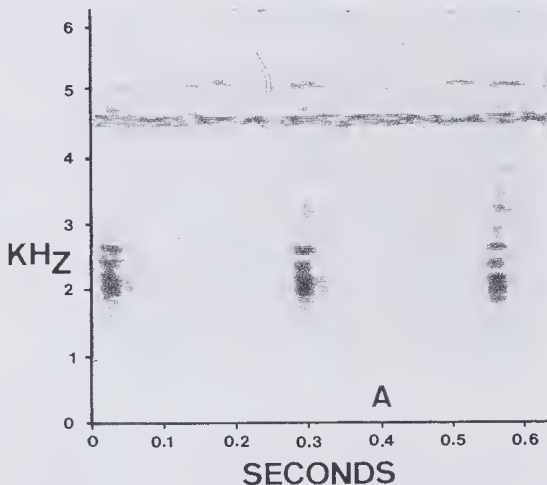


Fig. 1. Sound spectrograph of call of *L. genimaculata* recorded 23 January, 1977, Tully Falls, NEQ, by G.J. Ingram.



Fig 2. *L. eucnemis*, McIlwraith Ra., September, 1993.

genimaculata to the taxon with the 'soft tick'; and *eucnemis* to the other.

Calls of the two Australian taxa closely resemble those of the two New Guinean species. We conclude that the appropriate name for the population between Paluma-Big Tableland is *Litoria genimaculata*; and that for the Iron Ra.-McIlwraith Ra. taxon is *Litoria eucnemis* (Fig. 2). Thus *H. serrata* Andersson, 1916, becomes a junior subjective synonym of *L. genimaculata* (for photograph, see Cogger, 1992: 139). Further, pending investigation of the call of the Ducie R.-Wenlock R. population, it seems reasonable to assign that population to *L. eucnemis*.

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